

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Hark C. Chan      Examiner: Nano, Sargon N  
Serial No.: **09/836,397**      Group Art Unit: 2457  
Filed: 4/17/2001      Docket No.: LOCREM-01  
Title: **A DATA DELIVERY SYSTEM USING LOCAL AND REMOTE  
COMMUNICATIONS**

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APPEAL BRIEF

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Applicant submits the present appeal brief within two months of the filing of the Notice of Appeal on July 22, 2010.

Applicant had paid a total of \$540 as a result of filing three separate Appeal Briefs (filed on April 24, 2009, February 4, 2008, and November 14, 2006). Since the current fee for filing an Appeal Brief is also \$540. No fee is due for this filing. Nonetheless the commissioner is hereby authorized to charge any other fees which may be required, to deposit account 03-1243 (docket number LOCREM-01).

**(i) Real party in interest**

The real party in interest is the applicant, Hark C. Chan.

**(ii) Related appeals and interferences**

Applicant had filed an appeal for application serial number 11/760,088, which is the child of the present application. The application has been allowed after filing an appeal brief.

**(iii) Status of claims**

Claim 1 was cancelled. Claims 2-20 are rejected. Claims 2-20 are under appeal.

**(iv) Status of amendments**

An office action was mailed on April 28, 2010 to reopen prosecution after an appeal brief was filed on April 24, 2009. No amendment has been submitted after the office action of April 28, 2010.

**(v) Summary of claimed subject matter**

The present invention is directed to a system for communication through a wide area network (e.g., 110). The system comprises an apparatus (e.g., 130) and at least one portable unit (such as 180). The apparatus comprises a wide area interface (e.g., 140) and a local interface (e.g., 142). The portable unit comprises a wide area interface (e.g., 188) and a local interface (e.g., 186). The wide area interfaces of the apparatus and the portable unit can communicate with each other via the wide area network. The local interfaces of the apparatus and the portable unit can communicate with each other when they are located within a short distance from each other (relative to the wide area communication). At least one of the apparatus and the portable unit generates non-deterministic digital contents at multiple times without user action at these times.

An example of a non-deterministic digital content is a digital code generated by a random number generator. The device that generates the non-deterministic digital contents (e.g., the portable unit) delivers it to the non-generating device (e.g., the apparatus). The apparatus and the portable unit then use the digital contents as identification in communication through the wide area network.

The present invention is also directed to a method for an apparatus (e.g., 130) and at least one portable unit (e.g., 180) to communicate through a wide area network (e.g., 110). At least one of the apparatus and the portable unit generates non-deterministic digital contents at multiple times without user action at these times. When the apparatus and the portable device are close to each other (relative to the wide area communication), the non-deterministic digital content is delivered from the generating device to the other device. The digital content can be used as identification in communication between the apparatus and the portable unit via the wide area network.

One way to map claim 2 to the drawings and specification is as follows:

- (1) A system for communication through a wide area network: The wide area network is shown as reference numeral 110 in the drawings (e.g., Fig. 1A).
- (2) An apparatus and at least one portable unit: The apparatus is shown as reference numeral 130 in Fig. 2A. Fig. 1A shows many portable units (such as reference numerals 112-114). A detailed drawing of a portable unit is shown in Fig. 3A as reference numeral 180.
- (3) The apparatus comprising a wide area interface and a local interface: Fig. 2A shows an exemplary apparatus, which contains a wide area interface 140 and a local interface 142.
- (4) One of the portable units comprising a wide area interface and a local interface: Fig. 3A shows an exemplary portable unit, which contains a wide area interface 188 and a local interface 186. The wide area interfaces of the apparatus and the portable unit can communicate with each other via the wide area network (see page 9, lines 11 and 12 of the specification). The local interfaces of the apparatus and the portable unit can communicate with each other when they are located within a short distance from each other (see page 6, lines 2-3 of the specification).

(5) At least one member of said apparatus and said at least one portable unit generates non-deterministic digital contents at multiple times without user action at these times, said one member uses its local interface to deliver at least one of said digital contents to another member of said apparatus and said at least one portable unit: A random number generator and clock can be used to generate digital contents at predetermined times (see page 8, lines 4-12, of the application). The digital contents can be delivered using the local interface (see page 8, lines 12-16).

(6) Said digital contents being used by said apparatus and said at least one portable unit as identification in communication via said wide area network: The communication is described on page 8, lines 4-6 and page 9, lines 11-13 and 18-19.

One way to map claim 12 to the drawings and specification is as follows:

(1) A method for an apparatus and a portable unit to communicate through a wide area network: Page 8, lines 4-16, of the application describe the operation of an apparatus and a portable unit that can communicate through a wide area network.

(2) Generating non-deterministic digital contents by one of the apparatus and the portable unit at multiple times without user action at these times: Page 8, lines 9-12, describe the use of a clock and a random number generator to create digital contents.

(3) While the apparatus and portable unit are within a domain, delivering at least one of the digital contents by the one of the apparatus and the portable unit to another of the apparatus and the portable unit: Page 8, lines 12-16 describe the delivery of the digital contents.

(4) Using the at least one of the digital contents as identification in communication between the apparatus and the portable unit via the wide area network: The communication is described on page 8, lines 4-6 and page 9, lines 11-13 and 18-19.

**(vi) Grounds of rejection to be reviewed on appeal**

Whether claims 2-20 are unpatentable under 35 U.S.C. 103(a) over Weiss (U.S. Pat. No. 4,856,062) in view of Chen (U.S. Pub. No. 2004/0047358).

Although the first sentence of paragraph 2 (printed on page 2) of the Office Action states that “Claims 2-11 are rejected … over Weiss … in view of Chen,” the rest of paragraph 2 discusses the rejection of claims 12-20 over the same references. No other grounds for rejecting claims 12-20 are provided in the Office Action. Consequently, applicant assumes that the words “2-11” is a typo and claims 2-20 are rejected over Weiss in view of Chen.

**(vii) Arguments**

**(A) The Examiner Has Not Shown That Chen Is Proper Prior Art**

On page 3 of the Office Action dated April 28, 2010, the Examiner relied on col. 2, lines 57-62; paragraphs 0067, 0068, 0076; and Fig. 5 of Chen. According to the front page of Chen, its filing date is May 21, 2003, which is later than the priority date of the present application. The front page also states that it is a continuation of an application filed Jan. 31, 2001. Even this parent application has a filing date later than the priority date of the present application. Chen also states that it claims benefits of two provisional patent applications, 60/179, 042 filed Jan. 31, 2000 and 60/189,870 filed Mar. 16, 2000. However, a comparison of the cited Chen patent and the two provisional patent applications shows that they are not the same. In particular, it appears that the portions of Chen relied on by the Examiner are not present in these two provisional applications. As a result, Chen is not proper prior art that can be combined with Weiss to invalidate the claims of the present application.

**(B) Weiss And Chen Do Not Teach Or Suggest The Claim Invention**

**(a) Claim 2**

**(1) There is no teaching or suggestion in the cited references that non-deterministic digital content is delivered from one device to another device**

The Examiner states that “Weiss discloses a verification process between a portable device and a remote host where a user inputs a fixed code along with a non predicted code that is generated at a regular interval of time, without user intervention, in order to gain access and

establish communication with a host of a network.” (Office Action, page 3). The only disclosure in Weiss about a remote host is in a single paragraph:

“In the form of the invention where the goal is to grant access 90 to data stored in one or more **host** computers remote from the first computers issued to authorized users, an access control means 50 is typically located in close physical proximity to such **remotely located host** computers such as in a **host** computer room.” (col. 8, lines 10-20; emphasis added)

This paragraph provides no discussion about communication between an “access control means” and a “host computer”, let along delivery of non-deterministic digital content between the “access control means” and the “host computer”, as required by claim 2.

The Examiner did not contend that Chen teaches or suggests the communication of non-deterministic digital content between devices. Thus Weiss and Chen, singly or in combination, do not render claim 2 unpatentable.

**(2) There is no teaching or suggestion in the cited references that non-deterministic digital content is used as identification in communication**

The paragraph of Weiss in subsection (1) above also does not teach or suggest that “said digital contents being used by said apparatus and said at least one portable unit as identification in communication via said wide area network.” The Examiner applied Chen as follows:

- (a) “Chen teaches a home gateway system having multi-function wireless and wired networking, wireless and wired telephony, broadband, gateway device that provides automatic wireless and wired broadband initialization and bridging functionality.” (see page 3, lines 12-15 of the Office Action);
- (b) “Chen teaches wireless devices are connected to a gateway using local and wide area interface.” (see page 3, lines 16-17 of the Office Action).

These sentences in the Office Action do not contend that Chen teaches the use of non-deterministic digital content as identification. Thus Weiss and Chen, singly or in combination, do not render claim 2 unpatentable.

**(b) Claim 12**

Claims 12 recites “while the apparatus and portable unit are within a domain, delivering at least one of the digital contents by the one of the apparatus and the portable unit to another of the apparatus and the portable unit.” As discussed above in connection with claim 2, Weiss and Chen do not teach or suggest this limitation.

Claim 12 also recites “using the at least one of the digital contents as identification in communication between the apparatus and the portable unit via the wide area network.” As discussed above in connection with claim 2, Weiss and Chen do not teach or suggest this limitation.

As a result of the significant differences between Weiss/Chen and claim 12, claim 12 is patentable over the art relied upon by the Examiner.

**(C) Claims 8 and 17 are patentable over the applied prior art because the applied prior art does not teach the use an algorithm as digital content.**

Claims 8 and 17 recite that at least one digital content comprises an algorithm. In rejecting claims 8 and 17, the Examiner pointed to the abstract of Weiss (see page 4, lines 13-14 of the Office Action). The abstract of Weiss reads as follows (emphasis added):

“A portable hand held computing and indicating device for use in a verification system of the type wherein a first non-predictable code is generated at a first mechanism in accordance with a **predetermined algorithm** in response to both a unique static variable and a dynamic variable and a second non-predictable code is generated at a second mechanism in accordance with the **predetermined algorithm** in response to both the unique static variable and a second dynamic variable which corresponds to the first variable. The non-predictable codes are compared at the

second mechanism to effect verification. The device forms the first mechanism and includes a processor having the **algorithm preprogrammed** therein and a means for storing a static variable which is unique for each device. The device also includes a means for generating a time varying dynamic variable which is substantially the same as that generated at the second mechanism at a given instant of time. The stored unique variable and the currently generated dynamic variable are applied to the processor and the resultant non-predictable code is visually displayed. The program for executing the **algorithm** and the static variable are preferably stored in volatile memory which causes the program and the static variable to be erased if any effort is made to gain access thereto. All or a portion of the static variable may appear in visually perceptible form on the device."

Based on the abstract, the algorithm in Weiss is predetermined. This is different from the claim invention in which the digital content is non-deterministic. Consequently, claims 8 and 17 are patentable over the art relied upon by the Examiner.

#### **(D) Other Claims**

Other claims depend from claims 2 or 12 (directly or indirectly). They are patentable on at least the same basis as claims 2 and 12.

#### **Conclusion**

It is believed that all grounds of rejection have been satisfactorily answered. The allowance of the rejected claims is respectfully urged.

Respectfully Submitted

September 9, 2010



Hark C. Chan

## CLAIM APPENDIX

2. A system for communication through a wide area network, said system comprising:  
an apparatus comprising:
  - a first wide area interface for communicating with at least one portable unit via said wide area network; and
  - a first local interface for communicating with said at least one portable unit when said at least one portable unit is located within a domain;
  - said at least one portable unit comprising:
    - a second wide area interface for communicating with said apparatus via said wide area network; and
    - a second local interface for communicating with said apparatus when said at least one portable unit is located within said domain;
  - at least one member of said apparatus and said at least one portable unit generates non-deterministic digital contents at multiple times without user action at these times, said one member uses its local interface to deliver at least one of said digital contents to another member of said apparatus and said at least one portable unit, said digital contents being used by said apparatus and said at least one portable unit as identification in communication via said wide area network.
3. The system of claim 2 wherein said one member comprises a random number generator used for generating said digital contents.

4. The system of claim 2 wherein said apparatus and said at least one portable unit each comprises a memory for storing said at least one non-deterministic digital content.
5. The system of claim 2 wherein each of said first and said second local interfaces comprises a radio frequency interface.
6. The system of claim 2 wherein said at least one portable unit comprises a cellular phone.
7. The system of claim 2 wherein said at least one portable unit comprises a personal digital assist device.
8. The system of claim 2 wherein said at least one digital content comprises an algorithm.
9. The system of claim 2 wherein said at least one digital content comprises a digital code.
10. The system of claim 2 wherein said first local interface and said at least one portable unit performs authentication in delivering said at least one digital content.
11. The system of claim 2 wherein said one member can detect a presence of said another member and delivers said at least one digital content to said another member automatically without user intervention.

12. A method for an apparatus and a portable unit to communicate through a wide area network, comprising:

generating non-deterministic digital contents by one of the apparatus and the portable unit at multiple times without user action at these times;

while the apparatus and portable unit are within a domain, delivering at least one of the digital contents by the one of the apparatus and the portable unit to another of the apparatus and the portable unit; and

using the at least one of the digital contents as identification in communication between the apparatus and the portable unit via the wide area network.

13. The method of claim 12 wherein the one of the apparatus and the portable unit comprises a random number generator for generating the digital contents.

14. The method of claim 12 wherein the delivering is conducted using radio frequency signals.

15. The method of claim 12 wherein the portable unit comprises a cellular phone.

16. The method of claim 12 wherein the portable unit comprises a personal digital assist device.

17. The method of claim 12 wherein the at least one digital content comprises an algorithm.

18. The method of claim 12 wherein the at least one digital content comprises a digital code.
19. The method of claim 12 wherein the delivering comprises authenticating at least one of the apparatus and the portable unit.
20. The method of claim 12 wherein the one of the apparatus and portable unit can detect a presence of the another of the apparatus and the portable unit and deliver the at least one digital content to the another automatically without user intervention.

## **EVIDENCE APPENDIX**

none

## **RELATED PROCEEDINGS APPENDIX**

none